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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/082,333	02/26/2002	Ju Wan Kim	P67660US0	4101

43569 7590 07/12/2005

MAYER, BROWN, ROWE & MAW LLP
1909 K STREET, N.W.
WASHINGTON, DC 20006

EXAMINER	
AILES, BENJAMIN A	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/082,333	KIM ET AL.	
	Examiner	Art Unit	
	Benjamin A. Ailes	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 June 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 3-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 3-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to Amendment filed 17 June 2005.

2. Claims 1 and 3-10 have been examined.

Claim Rejections - 35 USC § 112

3. The amendments to claims 1-3 by the applicant have been entered into the record and the claims are now in conformance. The 112 2nd rejection has been withdrawn.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 3, and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. 2002/0013708), hereinafter referred to as Walker, in view of Socher et al. (U.S. 6,446,040), hereinafter referred to as Socher.

7. Regarding claims 1 and 8, Walker discloses a communication method among participants connected through a network in virtual environments, the method comprising the steps of:

a plurality of senders inputting and transmitting text messages (para. 0081, lines 2-8);

a receiver selecting reception and conversion of the text message from a desired sender among the plurality of senders into a speech (para. 0083, lines 2-5); and

the receiver converting the text message of the desired sender into the speech, and outputting the speech through a speaker while transmitting and receiving the text messages to and from other participants (para. 0081, lines 2-8 and para. 0083, lines 2-5);

selecting an identifier of the sender (para. 0022 and para. 0083, lines 9-14);

determining a virtual voice of the sender (para. 0023 and para. 0084, lines 1-6);

Walker teaches the step of determining a virtual voice of a sender (para. 0084, lines 1-6) in order to generate speech that sounds like the user, but is silent on the use of determining a sound effect in order to grasp a virtual position of the sender. However, in analogous art, Socher discloses an intelligent text-to-speech synthesis method of generating text into speech as well as adding sound effects in order to place special emphasis and place more meaning into the message (see Socher, col. 2, lines

37-58). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize the combination of the text message speech generator as disclosed by Walker and the speech synthesis with the addition of sound effects method as disclosed by Socher in order to place special emphasis and input more meaning into what is being said. One of ordinary skill in the art would have been motivated to make such a combination because by adding sound effects, the method of Walker is improved upon by enhancing the message sent by the user and is made to sound more life-like (Walker, para. 0084, lines 4-6, para. 0114, and Socher, col. 2, lines 47-58).

8. Regarding claims 3 and 9, in accordance with claims 1 and 8, Walker teaches the step of determining a virtual voice of a sender to be heard by the recipient (para. 0084, lines 1-6, para. 0107, lines 4-12, and para. 0114), an accent of the voice, and an intonation of the voice (para. 0107, lines 4-10, and para. 0114, lines 1-12).

9. Regarding claims 7 and 10, in accordance with claims 1 and 9, Socher discloses the sound effect having the ability to be music (see abstract).

10. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker in view of Abe (U.S. 5,940,797), and in further view of Socher.

11. Regarding claim 4, Walker teaches:

A text message receiving means for receiving text messages from a plurality of senders (para. 0081, lines 2-8).

Walker teaches the step of using speech synthesis in order to transform text into speech (para. 0084, lines 1-6) but is silent on the actual detailed method used in order

to complete the speech synthesis. However, in analogous art, Abe discloses a speech synthesis method used to convert text into speech that divides the text message into phonemes (col. 3, lines 53-57) and the conversion of the divided phonemes into a speech (col. 4, lines 49-56). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to use the speech synthesis phoneme dividing means as disclosed by Abe in combination with speech synthesis method as disclosed by Walker. One of ordinary skill in the art would have been motivated to make such a combination because by using the text message to speech method disclosed by Walker utilizing the speech synthesis method disclosed by Abe, one can enhance the output by identifying the input text by a sequence of phonemes of each word (Abe, col. 2, lines 28-30).

12. Walker teaches the step of determining a virtual voice of a sender (para. 0084, lines 1-6) in order to generate speech that sounds like the user, but is silent on the use of determining a sound effect in order to grasp a virtual position of the sender. However, in analogous art, Socher discloses an intelligent text-to-speech synthesis method of generating text into speech as well as adding sound effects in order to place special emphasis and place more meaning into the message (see Socher, col. 2, lines 37-58). One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to utilize the combination of the text message speech generator as disclosed by Walker and the speech synthesis with the addition of sound effects method as disclosed by Socher in order to place special emphasis and input more meaning into what is being said. One of ordinary skill in the art would have been

motivated to make such a combination because by adding sound effects, the method of Walker is improved upon by enhancing the message sent by the user and is made to sound more life-like (Walker, para. 0084, lines 4-6, para. 0114, and Socher, col. 2, lines 47-58).

13. Regarding claim 5, in accordance with claim 4, Walker teaches the step of using speech synthesis in order to transform text into speech (para. 0084, lines 1-6) but is silent on the use of synthesizing by vocabulary. However, in analogous art, Abe discloses a speech synthesis method used to convert text into speech that references to a word dictionary in order to generate accurate synthesized speech (2, lines 28-30 and 42-44) One of ordinary skill in the art at the time of the applicant's invention would have found it obvious to use the speech synthesis method utilizing a word dictionary as disclosed by Abe in combination with speech synthesis method as disclosed by Walker. One of ordinary skill in the art would have been motivated to make such a combination because by using the text message to speech method disclosed by Walker utilizing the speech synthesis method disclosed by Abe, one can enhance the output by identifying the input text by a sequence of phonemes of each word by referencing a word dictionary (Abe, col. 2, lines 28-30).

14. Regarding claim 6, in accordance with claim 4, Walker teaches the tone generating means for providing a tone, an accent, and an intonation of the speech (para. 0107, lines 4-10, and para. 0114, lines 1-12).

Response to Arguments

15. Applicant's arguments filed 17 June 2005 have been fully considered but they are not persuasive.

16. (A) Applicant argues: "Socher does not teach or suggest using the virtual position of the sender or the sender's surroundings to determine a sound effect."

17. As to point (A), the Examiner respectfully disagrees. In combination, Walker and Socher clearly disclose the ability to send and receive text messages with added sound effects which put more meaning into the message as explained in the rejection of claim 1 above. Socher discloses an environment wherein a user may put more meaning into speech output using sound effects. The sound effects add special meaning and provide emphasis to the message which could easily convey "virtual positions" of the sender, which is deemed the same as "grasping a virtual position of the sender." Socher reads on the idea of grasping a virtual position of a user because Socher discloses the environment wherein any type of sound effect can be placed into the message in order to place special emphasis and provide additional meaning into the communication process. In conclusion, the combination of Walker and Socher is functionally equivalent as the applicant's claimed invention.

18. (B) Applicant argues: "...no combination of Walker and Socher teach or suggest a communication method among participants connected through a network in virtual environments that includes converting a text message into speech, and determining a sound effect by grasping a virtual position of the sender and the sender's surroundings."

19. As to point (B), the Examiner respectfully disagrees for the same reasons as stated in point (A) and in reference to the rejection of claim 1 above.

Conclusion

20. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin A. Ailes whose telephone number is (571)272-3899. The examiner can normally be reached on M-F 7:30-5, First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571)272-3868. **The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300 (Effective July 15, 2005).**

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER

BAA